

What is claimed is:

1. An electronic coupon system for providing an electronic coupon to a user having a mobile communication device with a display device, said electronic coupon system comprising:

an electronic coupon information storage device for storing information relating to said electronic coupon;

a bar code generator for generating bar code information based at least on said information relating to said electronic coupon stored in said electronic coupon information storage device; and

a bar code information transmitter for transmitting to said mobile communication device said bar code information generated by said bar code generator.

2. The electronic coupon system set forth in claim 1, wherein said bar code generator generates said bar code information by using user identification information and said information relating to said electronic coupon stored in said electronic coupon information storage device.

3. The electronic coupon system set forth in claim 1, wherein said bar code generator generates said bar code information by using at least information relating to a combination of products or services for which the electronic coupon is valid.

4. The electronic coupon system set forth in claim 1, wherein said bar code information generated by said bar code generator includes image data for displaying a bar code on said display device of said mobile communication device.

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5. The electronic coupon system set forth in claim 1, wherein said bar code generator stores into an issued bar code information storage device user identification information, identification information for user-selected products or services for which the electronic coupons are valid, and information relating to at least a combination of user-selected products or services for which the electronic coupons are valid.
6. The electronic coupon system set forth in claim 1, further comprising electronic coupon information search means for searching information relating to said electronic coupon from said electronic coupon information storage device according to an instruction from a user, and outputting the search result to said mobile communication device of said user.
7. The electronic coupon system set forth in claim 1, further comprising a receiver for receiving bar code information scanned by a bar code scanner installed in a store and transmitted from a computer for the store,  
said bar code information being transmitted from said bar code information transmitter to a user's mobile communication device and displayed on said display device of the user's mobile communication device in the store.
8. The electronic coupon system set forth in claim 1, further comprising a receiver for receiving bar code information and identification information of a purchased product or service from a computer for a store in which a bar code scanner is installed,  
said bar code information being transmitted from said bar code information transmitter to a user's mobile communication device and scanned

from said display device thereof by said bar code scanner.

9. The electronic coupon system set forth in claim 1, further comprising a receiver for receiving bar code information, identification of a purchased product or service and quantity information from a computer for a store in which a bar code scanner is installed,

said bar code information being transmitted from the bar code information transmitter to a user's mobile communication device and scanned from said display device thereof by said bar code scanner.

10. The electronic coupon system set forth in claim 1, further comprising a receiver for receiving bar code information and a request for identification information of products or services for which the electronic coupons are valid and which corresponds to said bar code information received by said receiver from a computer for a store having a bar code scanner, said bar code information being transmitted from the bar code information transmitter to a user's mobile communication device and scanned from said display device thereof by said bar code scanner; and

a sender for sending said identification information of said products or services for which the electronic coupons are valid to said computer for the store in response to said request received from said computer for the store.

11. The electronic coupon system set forth in claim 10, further comprising:

means for receiving from said computer for the store identification information and quantity information for a purchased product or service corresponding to said bar code information; and

means for storing said bar code information and said identification

information and quantity information for the purchased product or service corresponding to said bar code information.

12. The electronic coupon system set forth in claim 7, further comprising a bar code comparator for comparing first bar code information received from said receiver and second bar code information generated by said bar code generator.

13. The electronic coupon system set forth in claim 12, wherein if said first bar code information and said second bar code information are the same, said bar code comparator additionally compares time stamp information of said first bar code information with time stamp information of said second bar code information.

14. The electronic coupon system set forth in claim 7, further comprising:  
a user information storage device for storing user identification information and user attribute information; and  
a data collector for determining a relationship between said user attribute information and products or services for which the electronic coupons are valid by extracting user identification information and identification information of the products or services for which the electronic coupons are valid by using at least said bar code information received by said receiver, and extracting said user attribute information from said user information storage device by using said user identification information.

15. The electronic coupon system set forth in claim 7, further comprising a data collector for extracting by using at least said bar code information received by said receiver and storing to a usage information storage device, user identification information and identification information of the products or services for which

the electronic coupons are valid,

    said data collector extracting user identification information of users that have purchased particular products or services based on information stored in said usage information storage device, and sending a survey request and/or a direct mail to the users based on the extracted user identification information.

16.     The electronic coupon system set forth in claim 7, further comprising means for determining whether or not said bar code information received from said computer for the store by said receiver is bar code information issued for that store and/or was scanned before an expiration.

17.     The electronic coupon system set forth in claim 7, further comprising second means for determining whether or not a purchased product or service associated with said bar code information is included in the products or services for which the electronic coupons are valid and which are extracted by using at least said bar code information.

18.     The electronic coupon system set forth in claim 17, further comprising means for storing into a storage device a discount amount for a purchased product or service determined by said second means for determining to be included in the products or services for which the electronic coupons are valid and which are extracted by using at least said bar code information.

19.     The electronic coupon system set forth in claim 18, further comprising means for reporting the discount amount accumulated during a predetermined period by each user to a telecommunication service provider relating to the user's mobile communication device.

20. The electronic coupon system set forth in claim 7, further comprising means for determining a discount amount based on identification information of the products or services for which the electronic coupons are valid and which are extracted by using at least said bar code information received by said receiver, and billing a provider of the products or services for which the electronic coupons are valid for an amount at least equal to said discount amount.

21. The electronic coupon system set forth in claim 8, further comprising:

a user information storage device for storing user identification information and user attribute information; and

a data collector for determining a relationship between said user attribute information and products or services for which the electronic coupons are valid by extracting user identification information and identification information of the products or services for which the electronic coupons are valid by using at least said bar code information received by said receiver, and extracting said user attribute information from said user information storage device by using said user identification information.

22. The electronic coupon system set forth in claim 8, further comprising a data collector for extracting by using at least said bar code information received by said receiver and storing to a usage information storage device, user identification information and identification information of the products or services for which the electronic coupons are valid,

said data collector extracting user identification information of users that have purchased particular products or services based on information stored in said usage information storage device, and sending a survey request and/or a direct

mail to the users based on the extracted user identification information.

23. The electronic coupon system set forth in claim 8, further comprising means for determining whether or not said bar code information received from said computer for the store by said receiver is bar code information issued for that store and/or was scanned before an expiration.

24. The electronic coupon system set forth in claim 11, further comprising second means for determining whether or not a purchased product or service associated with said bar code information is included in the products or services for which the electronic coupons are valid and which are extracted by using at least said bar code information.

25. The electronic coupon system set forth in claim 24, further comprising means for storing into a storage device a discount amount for a purchased product or service determined by said second means for determining to be included in the products or services for which the electronic coupons are valid and which are extracted by using at least said bar code information.

26. The electronic coupon system set forth in claim 25, further comprising means for reporting the discount amount accumulated during a predetermined period by each user to a telecommunication service provider relating to the user's mobile communication device.

27. The electronic coupon system set forth in claim 8, further comprising means for determining a discount amount based on identification information of the products or services for which the electronic coupons are valid and which are

extracted by using at least said bar code information received by said receiver, and billing a provider of the products or services for which the electronic coupons are valid for an amount at least equal to said discount amount.

28. The electronic coupon system set forth in claim 9, further comprising:

a user information storage device for storing user identification information and user attribute information; and

a data collector for determining a relationship between said user attribute information and products or services for which the electronic coupons are valid by extracting user identification information and identification information of the products or services for which the electronic coupons are valid by using at least said bar code information received by said receiver, and extracting said user attribute information from said user information storage device by using said user identification information.

29. The electronic coupon system set forth in claim 9, further comprising a data collector for extracting by using at least said bar code information received by said receiver and storing into a usage information storage device, user identification information and identification information of the products or services for which the electronic coupons are valid,

said data collector extracting user identification information of users that have purchased particular products or services based on information stored in said usage information storage device, and sending a survey request and/or a direct mail to the users based on the extracted user identification information.

30. The electronic coupon system set forth in claim 9, further comprising means for determining whether or not said bar code information received from

said computer for the store by said receiver is bar code information issued for that store and/or was scanned before an expiration.

31. The electronic coupon system set forth in claim 16, further comprising second means for determining whether or not a purchased product or service associated with said bar code information is included in the products or services for which the electronic coupons are valid and which are extracted by using at least said bar code information.

32. The electronic coupon system set forth in claim 31, further comprising means for storing into a storage device a discount amount for a purchased product or service determined by said second means for determining to be included in the products or services for which the electronic coupons are valid and which are extracted by using at least said bar code information.

33. The electronic coupon system set forth in claim 32, further comprising means for reporting the discount amount accumulated during a predetermined period by each user to a telecommunication service provider relating to the user's mobile communication device.

34. The electronic coupon system set forth in claim 9, further comprising means for determining a discount amount based on identification information of the products or services for which the electronic coupons are valid and which are extracted by using at least said bar code information received by said receiver, and billing a provider of the products or services for which the electronic coupons are valid for an amount at least equal to said discount amount.

35. An electronic coupon providing method for providing an electronic coupon to a user having a mobile communication device with a display device, said electronic coupon providing method comprising the steps of:

storing information relating to said electronic coupon into an electronic coupon information storage device;

generating bar code information based at least on said information relating to said electronic coupon stored in said electronic coupon information storage device; and

transmitting to said mobile communication device said bar code information generated in said step of generating bar code information.

36. The electronic coupon providing method set forth in claim 35, wherein said step of generating bar code information comprises a step of generating said bar code information by using user identification information and said information relating to said electronic coupon stored in said electronic coupon information storage device.

37. The electronic coupon providing method set forth in claim 35, wherein said step of generating bar code information comprises a step of generating said bar code information by using at least information relating to a combination of products or services for which the electronic coupons are valid.

38. The electronic coupon providing method set forth in claim 35, further comprising a step of receiving bar code information scanned by a bar code scanner installed in a store and transmitted from a computer for the store,

said bar code information being transmitted in said step of transmitting said bar code information to a user's mobile communication device and displayed

on said display device of the user's mobile communication device in the store.

39. The electronic coupon providing method set forth in claim 35, further comprising a step of receiving bar code information and identification information of a purchased product or service from a computer for a store in which a bar code scanner is installed,

said bar code information being transmitted in said step of transmitting said bar code information to a user's mobile communication device and scanned from said display device thereof by said bar code scanner.

40. The electronic coupon providing method set forth in claim 38, further comprising a step of comparing first bar code information received in said receiving step and second bar code information generated in said step of generating bar code information.

41. The electronic coupon providing method set forth in claim 40, wherein said comparing step comprises a step of, if said first bar code information and said second bar code information are the same, comparing time stamp information of said first bar code information with time stamp information of said second bar code information.

42. The electronic coupon providing method set forth in claim 38, further comprising a step of determining a relationship between user attribute information and products or services for which the electronic coupons are valid by extracting user identification information and identification information of products or services for which the electronic coupons are valid by using at least said bar code information received in said receiving step, and extracting said user

attribute information by using said user identification information, from a user information storage device for storing said user identification information and said user attribute information.

43. The electronic coupon providing method set forth in claim 38, further comprising a first step of extracting by using at least said bar code information received in said receiving step and storing into a usage information storage device, user identification information and identification information of products or services for which the electronic coupons are valid,

wherein said first step comprises a step of extracting said user identification information of users that have purchased particular products or services based on information stored in said usage information storage device, and sending a survey request and/or a direct mail to the users based on the extracted user identification information.

44. The electronic coupon providing method set forth in claim 39, further comprising a step of determining whether or not said bar code information received from said computer for the store in the receiving step is bar code information issued for that store and/or was scanned before an expiration.

45. The electronic coupon providing method set forth in claim 39, further comprising a second step of determining whether or not a purchased product or service associated with said bar code information is included in the products or services for which the electronic coupons are valid and which are extracted by using at least said bar code information.

46. The electronic coupon providing method set forth in claim 45, further

comprising a step of storing into a storage device a discount amount for a purchased product or service determined in said second step of determining to be included in the products or services for which the electronic coupons are valid and which are extracted by using at least said bar code information.

47. The electronic coupon providing method set forth in claim 38, further comprising a step of determining a discount amount based on identification information of the products or services for which the electronic coupons are valid and which are extracted by using at least said bar code information received in said receiving step, and billing a provider of the products or services for which the electronic coupons are valid for an amount at least equal to said discount amount.

48. The electronic coupon providing method set forth in claim 35, further comprising a step of receiving bar code information, identification of a purchased product or service and quantity information from a computer for a store in which a bar code scanner is installed,

said bar code information being transmitted in said transmitting step to a user's mobile communication device and scanned from said display device thereof by said bar code scanner.

49. The electronic coupon providing method set forth in claim 35, further comprising the steps of:

receiving bar code information and a request for identification information of products or services for which the electronic coupons are valid and which corresponds to said bar code information received in said receiving step from a computer for a store having a bar code scanner, said bar code information being transmitted in said transmitting step to a user's mobile communication

device and scanned from said display device thereof by said bar code scanner; and sending said identification information of said products or services for which the electronic coupons are valid to said computer for the store in response to said request received from said computer for the store.

50. The electronic coupon providing method set forth in claim 39, further comprising a step of determining a relationship between user attribute information and products or services for which the electronic coupons are valid by extracting user identification information and identification information of products or services for which the electronic coupons are valid by using at least said bar code information received in said receiving step, and extracting said user attribute information by using said user identification information, from a user information storage device for storing said user identification information and said user attribute information.

51. The electronic coupon providing method set forth in claim 39, further comprising a first step of extracting by using at least said bar code information received in said receiving step and storing into a usage information storage device, user identification information and identification information of products or services for which the electronic coupons are valid,

wherein said first step comprises a step of extracting said user identification information of users that have purchased particular products or services based on information stored in said usage information storage device, and sending a survey request and/or a direct mail to the users based on the extracted user identification information.

52. The electronic coupon providing method set forth in claim 44, further

comprising a second step of determining whether or not a purchased product or service associated with said bar code information is included in the products or services for which the electronic coupons are valid and which are extracted by using at least said bar code information.

53. The electronic coupon providing method set forth in claim 52, further comprising a step of storing into a storage device a discount amount for a purchased product or service determined in said second step of determining to be included in the products or services for which the electronic coupons are valid and which are extracted by using at least said bar code information.

54. The electronic coupon providing method set forth in claim 39, further comprising a step of determining a discount amount based on identification information of the products or services for which the electronic coupons are valid and which are extracted by using at least said bar code information received in said receiving step, and billing a provider of the products or services for which the electronic coupons are valid for an amount at least equal to said discount amount.

55. An electronic coupon providing program embodied on a medium for causing a computer to provide an electronic coupon to a user having a mobile communication device with a display device, said electronic coupon providing program comprising the steps of:

storing information relating to said electronic coupon into an electronic coupon information storage device;

generating bar code information based at least on said information relating to said electronic coupon stored in said electronic coupon information storage device; and

transmitting to said mobile communication device said bar code information generated in said step of generating bar code information.

56. The electronic coupon providing program set forth in claim 55, further comprising a step of receiving bar code information scanned by a bar code scanner installed in a store and transmitted from a computer for the store,

    said bar code information being transmitted in said step of transmitting said bar code information to a user's mobile communication device and displayed on said display device of the user's mobile communication device in the store.

57. The electronic coupon providing program set forth in claim 55, further comprising a step of receiving bar code information and identification information of a purchased product or service from a computer for a store in which a bar code scanner is installed,

    said bar code information being transmitted in said step of transmitting said bar code information to a user's mobile communication device and scanned from said display device thereof by said bar code scanner.

58. The electronic coupon providing program set forth in claim 56, further comprising a step of determining a relationship between user attribute information and products or services for which the electronic coupons are valid by extracting user identification information and identification information of products or services for which the electronic coupons are valid by using at least said bar code information received in said receiving step, and extracting said user attribute information by using said user identification information, from a user information storage device for storing said user identification information and said user attribute information.

59. The electronic coupon providing program set forth in claim 56, further comprising a first step of extracting by using at least said bar code information received in said receiving step and storing into a usage information storage device, user identification information and identification information of products or services for which the electronic coupons are valid,

wherein said first step comprises a step of extracting said user identification information of users that have purchased particular products or services based on information stored in said usage information storage device, and sending a survey request and/or a direct mail to the users based on the extracted user identification information.

60. The electronic coupon providing program set forth in claim 57, further comprising the steps of:

determining whether or not a purchased product or service associated with said bar code information is included in the products or services for which the electronic coupons are valid and which are extracted by using at least said bar code information; and

storing into a storage device a discount amount for the purchased product or service determined in said determining step to be included in the products or services for which the electronic coupons are valid and which are extracted by using at least said bar code information.

61. The electronic coupon providing program set forth in claim 56, further comprising a step of determining a discount amount based on identification information of the products or services for which the electronic coupons are valid and which are extracted by using at least said bar code information received in

said receiving step, and billing a provider of the products or services for which the electronic coupons are valid for an amount at least equal to said discount amount.

62. The electronic coupon providing program set forth in claim 57, further comprising a step of determining a relationship between user attribute information and products or services for which the electronic coupons are valid by extracting user identification information and identification information of products or services for which the electronic coupons are valid by using at least said bar code information received in said receiving step, and extracting said user attribute information by using said user identification information, from a user information storage device for storing said user identification information and said user attribute information.

63. The electronic coupon providing program set forth in claim 57, further comprising a first step of extracting by using at least said bar code information received in said receiving step and storing into a usage information storage device, user identification information and identification information of products or services for which the electronic coupons are valid,

wherein said first step comprises a step of extracting said user identification information of users that have purchased particular products or services based on information stored in said usage information storage device, and sending a survey request and/or a direct mail to the users based on the extracted user identification information.

64. The electronic coupon providing program set forth in claim 57, further comprising a step of determining a discount amount based on identification information of the products or services for which the electronic coupons are valid

and which are extracted by using at least said bar code information received in said receiving step, and billing a provider of the products or services for which the electronic coupons are valid for an amount at least equal to said discount amount.

65. A method for providing an electronic coupon to a user having a mobile communication device with a display device, said method comprising the steps of:

in response to a request from a user, preparing bar code data based at least on predefined electronic coupon data; and

sending to said mobile communication device said bar code data prepared in said preparing step.

66. The method set forth in claim 65, wherein said preparing step comprises a step of generating said bar code data by using user identification information and said predefined electronic coupon data.

67. The method set forth in claim 65, wherein said preparing step comprises a step of generating said bar code data which contains a code representing a combination of products or services to be purchased with the electronic coupons.

68. The method set forth in claim 65, further comprising a step of receiving bar code data scanned by a bar code scanner installed in a store and transmitted from a computer for the store,

said bar code data being sent in said sending step to a user's mobile communication device and displayed on said display device of the user's mobile communication device in the store.

69. The method set forth in claims 65, further comprising a step of receiving

bar code data and an identifier of a purchased product or service from a computer of a store,

    said bar code data being sent in said sending step to a user's mobile communication device and scanned from said display device thereof by a bar code scanner installed in the store.

70.     The method set forth in claim 65, further comprising the steps of:

        scanning by a bar code scanner, bar code data sent in said sending step to a user's mobile communication device and displayed on said display device of the user's mobile communication device in a store; and

        sending at least the scanned bar code data to a center server for processing the scanned bar code data.

71.     The method set forth in claim 68, further comprising steps of:

        verifying the scanned bar code data received in said receiving step; and  
        returning the verification result to the store.

72.     The method set forth in claim 71, further comprising steps of:

        receiving the verification result from a center server for processing the scanned bar code data; and

        if the verification result indicates valid, discounting the purchased product or service for which the electronic coupon is valid for a discount amount determined by the scanned bar code data.

73.     The method set forth in claim 69, further comprising the steps of:

        verifying the scanned bar code data received in said receiving step; and  
        if the verification is successful, determining a total discount amount for

one purchase corresponding to the scanned bar code data.

74. The method set forth in claim 73, said determining step comprising the steps of:

extracting identifiers of actually purchased products or services for which the electronic coupons are valid by using the scanned bar code data and the identifiers of the purchased products or services received in said receiving step; and

calculating said total discount amount based at least on a discount unit price of said actually purchased products or services, said discount unit price included in the predefined electronic coupon data.

75. The method set forth in claim 74, wherein if quantity data of the purchased products or services is also received in said receiving step, said quantity data is used in said calculating step.

76. The method set forth in claim 68, further comprising a step of billing a provider of the product or service for which the electronic coupon is valid for at least total of discount amount calculated by using at least the scanned bar code data.

77. The method set forth in claim 76, further comprising a step of paying a store in which said bar code data displayed on the display device of the user's mobile communication device is scanned and the product or service is purchased for at least said total of discount amount.

78. The method set forth in claim 68, further comprising a step of processing

at least said bar code data received in said receiving step to collect data including user identifiers and identifiers of purchased products or services for which the electronic coupons are valid.

79. The method set forth in claim 78, further comprising a step of determining a relationship between user attribute information pre-registered by the users and products or services for which the electronic coupons are valid by using the collected data.

80. The method set forth in claim 78, further comprising a step of sending a survey request or a direct mail to users who have purchased particular products or services, said users being extracted based on said collected data.

81. A method for utilizing an electronic coupon by a mobile communication device with a display device, said method comprising the step of:

requesting bar code data for a product or service for which the electronic coupon is valid to a center server for processing said bar code data;

receiving the bar code data from said center server;

displaying said received bar code data on said display device of the requesting mobile communication device.

82. The method set forth in claim 81, further comprising a step of:  
paying a price for purchased products or services without discount set for the purchased products or services for which the electronic coupons are valid.

83. The method set forth in claim 81, wherein said requesting step comprises a step of requesting bar code data for a combination of products or services for

**which the electronic coupons are valid.**